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EDITORIAL COMMENT

Does androgen deprivation therapy increase the risk of impaired cognition or Alzheimer disease in men with prostate cancer? Two large studies suggest that the risk is not increased.^{1,2} But other studies have shown an increased risk of Alzheimer disease and impaired cognition.³ Marzouk et al found no impact of androgen deprivation therapy on self-reported cognitive function in men with localized prostate cancer.

In our study we obtained an identical result.⁴ We used data from MedWatch, the FDA (Food and Drug Administration) Safety Information and Adverse Event Reporting Program. Machine readable data from MedWatch, including adverse drug reaction reports from manufacturers, are part of a public database. We used the online tool OpenVigil 2.1⁵ to query the database and determine whether the combination of drug and adverse event were related.

We analyzed adverse event reporting data for certain androgen deprivation drugs, including the

LHRH (luteinizing hormone-releasing hormone) agonists leuprolide, goserelin triptorelin and histrelin, the antiandrogens flutamide, nilutamide, enzalutamide and bicalutamide, the LHRH antagonist degarelix, the CYP17 inhibitor abiraterone and the antifungal ketoconazole, which is also an antiandrogen administered in men with advanced prostate cancer. None of these drugs was significantly related to a risk of Alzheimer disease or impaired cognition.

Perhaps prostate cancer itself or the stress that it imposes on the man who has it may be detrimental to mood and intellect, increasing susceptibility to Alzheimer disease and cognitive disorder.

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